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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,215	03/10/2005	Kotoyoshi Murakami	740613-146	2636
22204	7590	09/27/2005	EXAMINER	
NIXON PEABODY, LLP 401 9TH STREET, NW SUITE 900 WASHINGTON, DC 20004-2128			EDMONDSON, LYNNE RENEE	
			ART UNIT	PAPER NUMBER
			1725	

DATE MAILED: 09/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/500,215

Applicant(s)

MURAKAMI, KOTOYOSHI

Examiner

Lynne Edmondson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/24/05</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claims 7-9 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 3, 5 and 6 of U.S. Patent No. 6789722 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because both teach a friction agitation welding apparatus capable of joining superposed plate workpieces comprising a rotatably driven friction agitation tool and a back up tool with a cavity aligned with the friction tool and supporting the workpiece. However the instant claims teach the cavity as an annular groove where the '722 claims teach a curved surface.

It would have been obvious to one of ordinary skill in the art at the time of the invention that although the terms are different the structures are the same and serve the same purpose.

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2. Claims 7-10 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 2 of copending Application No. 10/623807. Although the conflicting claims are not identical, they are not patentably distinct from each other because both teach a friction agitation welding apparatus capable of joining superposed plate workpieces comprising a rotatably driven friction agitation tool and a back up tool with a cavity aligned with the friction tool and supporting the workpiece. However the instant claims teach the cavity as an annular groove where the '722 claims teach an annular concave groove.

It would have been obvious to one of ordinary skill in the art at the time of the invention that although the terms are slightly different the structures are the same and serve the same purpose.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent

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granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 7 and 8 are rejected under 35 U.S.C. 102(a) as being anticipated by Waldron et al. (USPN 6460752 B1).

Waldron teaches a friction agitation welding apparatus capable of joining superposed plate workpieces comprising a rotatably driven friction agitation tool and a back up tool with a cavity aligned with the friction tool and supporting the workpiece (figures 1, 5, col 3 lines 50-60 and col 4 lines 20-37).

5. Claims 7 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Colligan (USPN 5769306).

Colligan teaches a friction agitation welding apparatus capable of joining superposed plate workpieces comprising a rotatably driven friction agitation tool and a back up tool with a cavity aligned with the friction tool and supporting the workpiece (figures 2, 4A, col 3 lines 33-49 and col 4 lines 8-25).

6. Claims 1, 2 and 4-9 are rejected under 35 U.S.C. 102(e) as being anticipated by McTernan et al. (USPN 6742697 B2).

McTernan teaches a method of friction stir welding superposed plate by pressing plates between a friction stir tool and a grooved backing plate (figures 4-6) wherein the workpieces have a bore formed therein (col 2 lines 48-64 and col 9 line 48 – col 10 line 21), rotating and advancing the friction tool to penetrate the workpieces and generate

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frictional heat to create a plasticized region which forces plasticized material into the bore. The joint solidifies on cooling (col 6 lines 28-49). An outside pressure is applied and excess material is removed (figure 6B and col 6 lines 4-25). Plates comprise a variety of materials including but not limited to Al and steel (col 3 lines 41-65 and col 8 lines 50-59).

7. Claims 1-6 rejected under 35 U.S.C. 102(e) as being anticipated by Stol et al. (USPN 6769595 B2).

Stol teaches a method of friction stir welding superposed plate by pressing plates between a friction stir tool (rivet) and a backing plate wherein the workpieces have a bore formed therein , rotating and advancing the friction tool to penetrate the workpieces and generate frictional heat to create a plasticized region which forces plasticized material into the bore. The joint solidifies on cooling (figure 5, col 2 lines 5-27, col 5 lines 7-48 and col 8 lines 25-40). An outside pressure is applied and excess material is removed (figure 6B and col 6 lines 4-25). Plates comprise a variety of materials including but not limited to Al and steel (col 1 line 66 – col 2 line 4 and col 2 lines 28-61).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mahoney et al. (USPN 5975406), De Koning (USPN 6360937 B1), Stol et al. (USPN 6769595 B2) and Uchida et al. (JPN 2003-334671 A).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynne Edmondson whose telephone number is (571) 272-1172. The examiner can normally be reached on Monday through Thursday from 6:30 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lynne Edmondson
Primary Examiner
Art Unit 1725

LEB 7/23/05

LRE